

## SECTION 7: COMPLEMENTARY POLICIES & REGULATIONS

### RECOMMENDATION #5: Plant Labeling

#### Background

To ensure that landscape water use goals will be met, living plant material must be properly identified and categorized by water use. This information is needed at both point of sale for “Do-It-Yourself” projects and point of installation for contractor-installed projects.

Current plant labeling requirements are inconsistent and inadequate. The California Food and Agricultural Code (section 53481) states that all nursery stock sold in California “shall be labeled . . . if so required by regulations.” However, the current regulations for Nursery Stock Grades and Standards California Code of Regulations (CCR), Title 3 (and reproduced in the Nursery Inspection Procedures Manual , Item 5 do not require nursery stock labeling. CCR section 3061 stipulates that plants sold in the State *may* be labeled, and if so, must then comply with the Food and Agricultural Code’s labeling requirements. CCR section 3062 then adds that nursery stock offered for sale *need not* be graded or tagged, at the discretion of the person offering the stock for sale. Clearly, improved labeling requirements are needed for all ornamental plant materials sold and installed in California.

#### *Labeling the Water Use of Ornamental Plants Sold at Retail*

An estimated 41% of the households (47 million) in the United States consider themselves gardeners (National Gardening Association, *What Gardener’s Think*, 2009). Of these gardeners, it is estimated that only 9% are Master Gardeners and Garden Enthusiasts, who are considered to be plant knowledgeable, which demonstrates the need and the importance of providing horticultural information (botanical and common name and cultural information) at the point of sales for all consumers. Independent gardening surveys indicate that one of the most important considerations when purchasing a landscape plant is that the plant purchased is accompanied with an informative label containing specific plant information. Ornamental plants are labeled by the wholesale nursery and floricultural growers to provide consumer information, for example: a) botanical name; b) common name; c) cultivar name; d) plant description; e) location (sun or shade); f) water requirement; g) climate zone; h) growth habit. This information is provided by either the plant label manufacturer or from their customer (wholesale grower) and derived from horticultural references. Horticultural references are most often written by horticultural experts whose basis of information is from landscape experience and not by field based-research. Therefore, specific to plant water use (very low, low, medium or high), there is very little field, science-based research (statistical) that exists for ornamental plants in California. Adding to the complexity for specific plant water use or requirement is that myriad climate zones (24) and soil types in California, which affects plant water use and availability.

There is no legal or scientific authority that provides landscape water use requirements of ornamental plants in California. The Water Use Classification of Ornamental Species (WUCOLS) is one of the required resources by the Model Water Efficient Landscape Ordinance (MWELO) that provides water use information for 3,546 plant taxa in six climate regions of California based on the California Irrigation Management Information System (CIMIS) evapotranspiration zones. The assignment of plant water use in WUCOLS was conducted by horticultural and academic professionals with many years of landscape experience who served in committees representing six California regions. Based on a qualitative

research approach, professionals employed the consensus process for assigning water use classifications to plants in six regions of the state. If no horticultural experience or knowledge of a plant's water use was known, the professionals passed on assigning a water use rating. While WUCOLS represents 3,546 plant taxa, less than 6% have been scientifically researched for water use and there are thousands more plants sold in California that are not in WUCOLS, nor have been scientifically researched.

### *Labeling of Ornamental Plants at Point of Installation and Inspection*

For installation of ornamental plants at a permitted project, MWELo requires that plant palettes be chosen according to the landscape hydrozone and plant water usage. MWELo prescribes a Maximum Applied Water Allowance that must be calculated and may not be exceeded during the design and permit approval stage. Specific plants are chosen, approved and installed to meet the MWELo requirements. The newly updated MWELo calls for a third party audit to ensure that every landscape subject to the ordinance is installed per plan, including plant material.

The typical process for most landscape projects is for containerized ornamental plants to be delivered directly to the job site. The landscape contractor then installs these plants according to the landscape design. Once planted, it is typical to remove plant labels, leaving these plants with no identification. Therefore, unless the building inspector, water conservation specialist, or MWELo auditor is thoroughly knowledgeable in plant identification and nomenclature, verification of installed plants as consistent with MWELo ordinance requirements might not be possible without the installed plants being labeled.

### *The Independent Technical Panel Recommends That:*

Water Use Labeling: Require that all plant taxa sold in California be identified at the point of sale by water use (low, medium, high) by an approved process (WUCOLS, science-based research or a Department of Water Resources [DWR] approved process) and organization.

Point of Installation Identification: Require that representative plants delivered to a landscape job site remain labeled until the project is inspected and signed off.

Programmatic: Revise State regulations to make labeling for plant identification and water use mandatory, rather than voluntary.

### **Proposals (Administrative):**

For the Department of Food and Agriculture: The Plant Health and Pest Prevention Services Division should use its current authorities to modify its Regulations for Nursery Stock Grades and Standards to ensure that all taxa of ornamental landscape plants are properly identified and characterized as to water use, both at retail and upon installation in a landscape subject to MWELo. Specifically, CCR, Title 3, Section 3061 pertaining to plants being sold should be amended to replace the words "may be labeled" with "shall be labeled". Additionally, CCR section 3062 should be amended to change the words "Nursery stock, when offered for sale, need not be graded and tagged at the discretion of the person offering the stock for sale;" to the following: "Nursery stock, when offered for sale, shall be graded and tagged;". These changes should become effective January 1, 2017.

For the Department of Water Resources (1): DWR should commission a stakeholder group to develop a project plan with deliverables and a timeline that will enable all ornamental plant material sold in California to be labeled as per MWELo water use ratings.

1. Commission qualified an academic project representative as the project leader for project plan development, implementation and database management.
2. Identify stakeholder groups (landscape professionals [designers, architects, and contractors], academics, non-governmental organizations, wholesale plant growers and retailers, plant label manufacturers) and convene such representatives to identify requirements for labeling all ornamental plants with water ratings.
3. Identify current methodology for classifying plants for water use (WUCOLS process, science-based research, ASABE X623 or other) and choose what method or methods to be used for evaluating plant water use.
4. Define project plan deliverables and timeline once the methodology for validating plant water use is accepted.
5. As part of the project plan, the Independent Technical Panel recommends investigation of the following requirements:
  - a. Plant database (WUCOLS or equivalent) & ongoing maintenance
  - b. Quick Response (QR) code technology
  - c. GIS technology
  - d. Plant photographs (seasonal)
  - e. Plant descriptions
  - f. Link to existing database (UC IPM) for pest and disease information

For the Department of Water Resources (2): DWR should modify MWELo to require that at least one or two representatives of each selected plant species planted in every landscape meeting MWELo requirements be identified by a label affixed to the plant(s) itself with the correct nomenclature to ensure that plants can be verified as per approved MWELo plan during final inspection or audit process.

#### **Proposal (Legislative):**

The following provisions of Division 18, Chapter 5 (Nursery Stock Grades and Standards) of the Food and Agricultural Code should be revised as indicated:

#### **Article 4. Regulations**

**53391.** The director may adopt regulations which may be necessary to carry into effect the purposes of this chapter and each section of it, and may issue in relation to this chapter explanatory data and charts.

**53392.** The director by regulations may provide for grade sizes of the different kinds of nursery stock, and may provide that nursery stock shall be labeled with grade sizes which are established by such regulations. The director may make such other regulations as are necessary to carry out the provisions of this chapter.

**53393.** Not later than January 1, 2017, the director shall adopt regulations to implement sections 53481(e), 53482, and 53483 of this chapter.

## **Article 7. Labeling**

**53481.** When nursery stock is sold, it shall be labeled plainly and legibly as to the grade size, if so required by regulations, and as to the correct name and water use characteristics as follows:

(a) The correct name for ornamentals, except roses, fruit trees, and annual or herbaceous perennial ornamental plants, shall be the botanical name including subspecies, hybrid, cultivar or variety (if any).

(b) The correct name for fruit trees shall be the recognized common name and cultivar.

(c) The correct name for turf shall be the kind and cultivar.

(d) The correct name for roses, annual or herbaceous perennial ornamental plants, dormant bulbs, tubers, roots, corms, rhizomes, pips, and other kinds of nursery stock shall be the cultivar name and botanical name (if available), except that the recognized common name (if any) shall be required whenever no cultivar name has been given or can be determined.

(e) The correct water use classification for any taxa listed in the Water Use Classification of Ornamental Landscape Species.

**53482.** In order to identify nursery stock properly, whenever it is shipped, delivered, or transported to any purchaser, each plant shall be individually labeled as to the correct name. The director may create exceptions to this section by regulation, consistent with the need to correctly identify plants that are subject to inspection after installation in a landscape subject to the Model Water Efficient Landscape Ordinance or any local landscape ordinance.

**53483.** Nursery stock on display for sale at retail shall be individually labeled, except that plants of the same taxa when packaged inseparably together may be identified by a single label on each such package. Turf shall be labeled by a sign showing the required correct name of the stock on display.